

LXX. — *Descriptions of new Batrachians and Reptiles discovered by Mr. M. G. Palmer in South-western Colombia.*
By G. A. BOULENGER, F.R.S.

In a previous number of these 'Annals' * I have described three new reptiles from Mr. M. G. Palmer's collection in South-western Colombia under the names of *Lepidoblepharis peraccae*, *Anolis palmeri*, and *Atractus melas*. I am now able to add three batrachians and six reptiles to the list of the discoveries of this successful collector.

Hyla palmeri.

Tongue circular, nearly entirely adherent. Vomerine teeth in two curved transverse series close together just behind the level of the rather large choanæ. Head rather small, a little broader than long; snout short, rounded, not projecting beyond the mouth; canthus rostralis obtuse; loreal region very oblique, concave; interorbital region much broader than the upper eyelid; tympanum distinct, half the diameter of the eye. Outer fingers nearly half-webbed; no rudiment of pollex; toes entirely webbed; disks as large as the tympanum; subarticular tubercles small. The tibio-tarsal articulation reaches the eye. Skin granulate, more coarsely on the belly and under the thighs; a curved fold from the eye to the shoulder, covering the upper third of the tympanum; a sinuous transverse fold above the vent; a fold along the outer side of the arm and of the tarsus; an obtusely pointed dermal flap at the heel. Yellowish, with small black spots or dots on the head and anterior part of the body.

From snout to vent 43 mm.

Two specimens, female and young, from Jimenez.

Leptodactylus mantipus.

Tongue oval, entire. Vomerine teeth in two slightly arched series behind the choanæ. Snout rounded, as long as the orbit, not projecting beyond the mouth, with well-marked canthus and oblique, concave loreal region; nostril nearer the tip of the snout than the eye; interorbital space broader than the upper eyelid; tympanum three-fifths the diameter of the eye. Fingers rather short, with feebly swollen tips, first and second equal; toes moderate, not fringed, the tips dilated into small but very distinct disks; subarticular

* Ser. 8, vol. i. 1908, p. 111.

tubercles moderate; two small metatarsal tubercles. The tibio-tarsal articulation reaches the eye. Back with small warts, some of them confluent into short ridges; a glandular dorso-lateral fold. Greyish above, tinged with pink between the canthi rostrales and dorso-lateral folds; dark markings on the back and a dark cross-band between the eyes; a dark canthal streak; sides of body dark grey, dotted with whitish; limbs with dark cross-bands; lower parts brown, dotted with whitish.

From snout to vent 33 mm.

A single specimen from San Antonio.

Hylodes calcaratus.

Tongue oval, slightly nicked behind. Vomerine teeth in two small groups behind the level of the choanæ. Head slightly broader than long; snout rounded, not projecting beyond the mouth, with obtuse canthus and concave loreal region; interorbital space broader than the upper eyelid; tympanum distinct, one-third the diameter of the eye. Fingers and toes with moderately large terminal disks; first finger shorter than second; toes free. Tibio-tarsal articulation reaching between the eye and the tip of the snout. Skin smooth above and beneath; a small conical tubercle on the upper eyelid and another on the heel. Pink and greenish above, with olive, black-edged, symmetrical markings; lower parts greyish brown, marbled with blackish.

From snout to vent 17 mm.

A single specimen from San Antonio.

Anolis eulæmus. (Fig. 1.)

Head moderate, once and two-thirds as long as broad, as long as the tibia; forehead and interorbital and occipital regions deeply concave; frontal ridges short and weak; upper head-scales small, keeled, the larger pluricarinate; scales of the supraorbital semicircles enlarged, separated by two series of scales; largest supraoculars not larger than the scales on the middle of the snout; occipital enlarged, but smaller than the ear-opening, separated from the supraorbital semicircles by five or six rows of scales; canthus rostralis distinct, canthal scales seven or eight; loreal rows eight or nine; seven upper labials to below the centre of the eye; ear-opening large, oval. Gular appendage very large, extending posteriorly beyond the thorax; gular scales smooth. Body compressed; a slight nuchal fold. Scales very small, granular, larger and keeled on the middle of the back, largest

and smooth on the belly. The adpressed hind limb reaches the nostril; digital expansions moderately broad; 21 lamellæ under phalanges ii. and iii. of the fourth toe. Tail feebly compressed, without dorsal series of enlarged scales, a little over twice as long as head and body. Male with enlarged postanal scales. Purplish brown above, with rather indistinct darker transverse bars on the back and large round lighter spots on the sides; lower parts whitish, the gular appendage brown in front.

	mm.
Total length	290
Head	24
Width of head	14
Body	66
Fore limb	45
Hind limb	77
Tibia	24
Tail	200

A single male specimen from near Pavas.
Allied to *A. fasciatus*, Blgr.

Fig. 1.

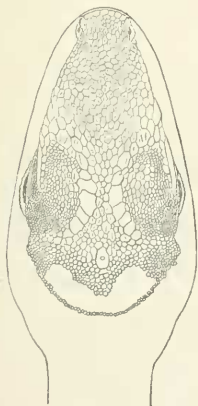
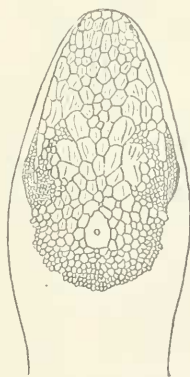


Fig. 2.

Fig. 1.—*Anolis eulæmus*.Fig. 2.—*Anolis antonii*.

Anolis antonii. (Fig. 2.)

Head moderate, once and two-thirds as long as broad, a little longer than the tibia; forehead concave, frontal ridges short but strong; upper head-scales rather large, rough and strongly keeled; scales of the supraorbital semicircles

enlarged, separated by one series of scales; two strongly enlarged supraoculars, broader than long and in contact with the supraorbitals; occipital larger than the ear-opening, separated from the supraorbitals by two series of scales; canthus rostralis sharp, canthal scales four; loreal rows five; six or seven labials to below the centre of the eye; ear-opening moderately large, oval. No gular appendage (female); gular scales feebly keeled. Body cylindrical. Dorsal scales small, flat, keeled, becoming gradually smaller towards the sides, where they are minute and granular; ventral scales larger than dorsals, flat, juxtaposed, faintly keeled. The adpressed hind limb reaches the eye; digital expansions moderately broad; 16 lamellæ under phalanges ii. and iii. of the fourth toe. Tail not compressed, once and two-thirds as long as head and body, covered with large strongly keeled scales. Reddish brown above, with a series of six small dark brown spots on the spine; a rusty, dark-edged cross-band between the eyes; lower parts much obscured by brown dots.

	mm.
Total length.....	143
Head.....	15
Width of head.....	9
Body.....	38
Fore limb.....	21
Hind limb.....	39
Tibia.....	12
Tail.....	90

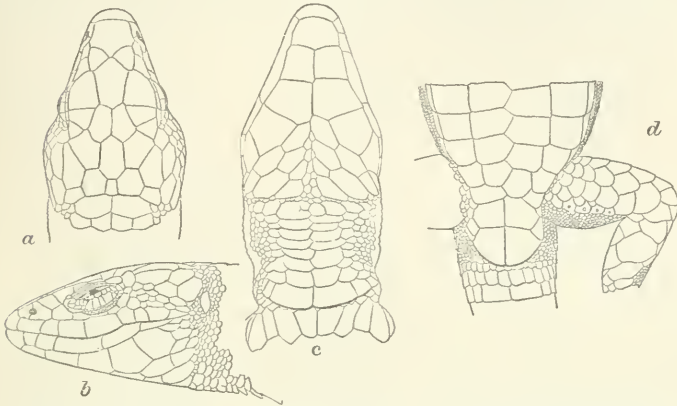
A single female specimen from San Antonio.
Allied to *A. fusco-auratus*, a'Orb.

Prionodactylus palmeri. (Fig. 3.)

Snout short; body rather short. Upper head-shields distinctly striated; fronto-nasal single, forming a short suture with the frontal; fronto-parietals, parietals, and interparietal subequal in size; three occipitals, median smallest; two large transverse postoccipitals; three supraoculars, first largest; nostril between two nasals; posterior nasal, loreal, and freno-ocular forming a triangle; upper temporals large, lower small, not keeled; seven upper and five lower labials; chin-shields, one anterior and four pairs, the two first pairs forming a suture; a double longitudinal row of transversely enlarged gulars; collar-shields eight, the median pair very large. Dorsal scales strongly keeled, about twice as long as broad; upper lateral scales small, hexagonal, keeled, lower very small, granular, smooth; 50 scales, including ventral

plates, round the middle of the body, 31 from occiput to base of tail. Ventral plates large, in six longitudinal rows, median and outer smaller than the others, and 20 transverse rows. Two pairs of large præanals, an anterior and a posterior, and a small shield on each side. Subdigital scales smooth. 4 or 5 femoral pores on each side. Caudal scales forming regular

Fig. 3.



Prionodactylus palmeri. *a*, upper view of head; *b*, side view of head; *c*, lower view of head; *d*, anal region.

annuli, upper like the dorsals, lower larger and smooth. Brown above, with a light dorso-lateral streak between two dark ones; a fine yellowish line on the upper lip, extending to the shoulder, continued on the body as a series of white, black-edged ocelli; chin and throat pale olive-brown, belly orange, spotted with black.

	mm.
Total length (tail reproduced)	127
Head	17
Width of head	11
From end of snout to fore limb.	25
" " vent	67
Fore limb	21
Hind limb	32

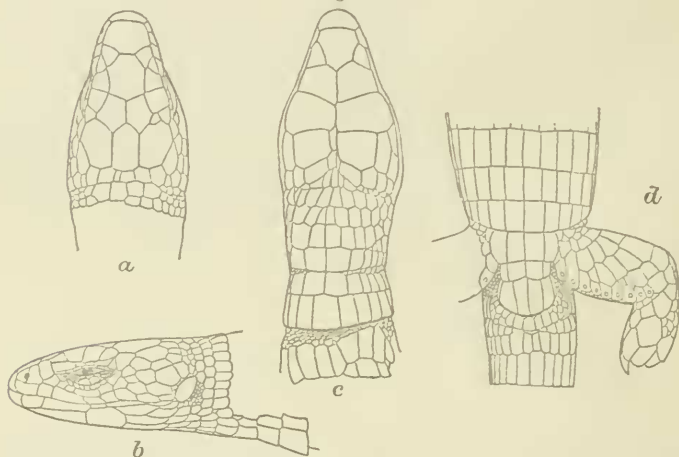
A single female specimen from San Antonio.

Euspondylus stenolepis. (Fig. 4.)

Head small, snout short and very obtuse; body elongate. Fronto-nasal broader than long, forming a suture with the

frontal, separating the small præfrontals; frontal little longer than broad; interparietal pentagonal, as long as and a little narrower than the parietals; five small occipitals; four supraorbitals, first smallest; nostril between two nasals; posterior nasal in contact with the freno-orbital; a loreal; a series of large infraorbitals; temporal shields large; seven upper and five lower labials; chin-shields, four pairs, first small and separated by a large post-symphysial, second and third forming a median suture; gular plates large, forming

Fig. 4.



Euspondylus stenolepis. *a*, upper view of head; *b*, side view of head; *c*, lower view of head; *d*, anal region.

seven transverse series between the chin-shields and the collar-plates, of which there are nine. Dorsal scales very narrow, obtusely keeled, shorter than the ventrals; 44 scales round the middle of the body, ventrals included, 30 from occiput to base of tail. Ventral plates large, in 12 longitudinal and 18 transverse series. Four anterior and four posterior præanals, anterior as long as broad, posterior much longer than broad. 9 femoral pores on each side. Caudal scales like those on the body. Dark brown above, yellowish beneath; a rather indistinct light dorso-lateral streak.

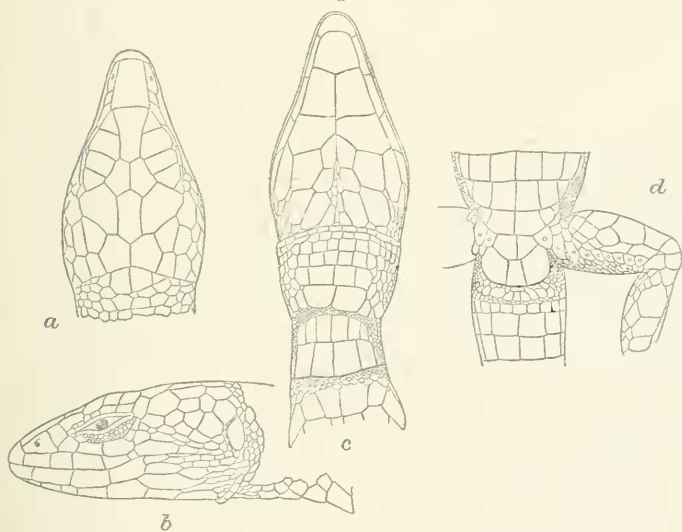
Total length (tail reproduced)	mm. 95
Head	12
Width of head	7
From end of snout to fore limb	20
Fore limb	14
Hind limb	20
From end of snout to vent	58

A single male specimen, taken from the stomach of a bird at San Antonio.

Oreosaurus lævis. (Fig. 5.)

Head rather elongate, snout pointed; body moderately elongate. Fronto-nasal quadrangular, much longer than broad, as long as the frontal; frontal pentagonal, as broad as the fronto-nasal in front, narrower behind; fronto-parietals shorter than the interparietal, which is hexagonal and much narrower than the parietals; a pair of occipitals; four supra-oculars; a loreal; a row of large infraorbitals; temple shielded; six upper and four lower labials; chin-shields, one

Fig. 5.



Oreosaurus lævis. a, upper view of head; b, side view of head; c, lower view of head; d, anal region.

anterior and three pairs, the two first pairs forming a suture and followed by large gulars which, further back, form six transverse series; collar-shields six. Dorsal scales smooth, quadrangular, twice to twice and a half as long as broad; lateral scales small, flat granules; 34 scales, including ventral plates, round the middle of the body, 37 from occiput to base of tail. Ventral plates large, in 8 longitudinal and 19 transverse rows. Præanal plates five, two in front, three behind. Scales on the limbs smooth, except on the upper

surface of tibia, where they are faintly keeled. 9 or 10 femoral pores on each side. Caudal scales smooth, quadrangular, forming regular annuli. Blackish brown, with scattered white dots above, these dots being in the centre of large round black spots; ventral plates edged with whitish behind.

	mm.
Total length	160
Head	19
Width of head	11
From end of snout to fore limb	30
" " vent	72
Fore limb	22
Hind limb	25
Tail	83

A single male specimen from San Antonio.

Geophis nigro-albus.

Maxillary not extending beyond palatine in front, the first tooth corresponding to the suture between the second and third labial shields. Eye small, nearly as long as its distance from the mouth. Rostral rather large, a little broader than deep, the portion visible from above measuring about one-third its distance from the frontal; internasals broader than long, one-third the length of the præfrontals, which are as long as broad; frontal broader than long, as long as its distance from the rostral, much shorter than the parietals; supraocular small, but more than twice as large as the postocular; loreal twice as long as deep; one postocular; six upper labials, third and fourth entering the eye; three or four lower labials in contact with the anterior chin-shields, which are slightly longer than the posterior and separated from the symphysial. Scales in 15 rows, smooth on the anterior part of the body, feebly but distinctly keeled on the posterior part. Ventrals 142; anal entire; subcaudals 42. Blackish above; head behind the supraoculars and frontal and lower parts white.

Total length 135 mm.; tail 25.

A single young specimen from Pavas.

Very closely allied to *G. hoffmanni*, Peters.